

OVERVIEW INFORMATION

- 1. Agency Name:** Air Force Office of Scientific Research (AFOSR)
4015 Wilson Boulevard, Room 712
Arlington, VA 22203-1954
- 2. Program Name:** Medical Free Electron Laser Research Program
- 3. Funding Opportunity Title:** Centers for Biomedical Research with Free Electron Lasers
- 4. Funding Opportunity Number:** AFOSR BAA 2003-4
- 5. Catalog of Federal Domestic Assistance (CFDA) Number:** 12.630
- 6. CFDA Title:** Basic, Applied, and Advanced Research in Science and Engineering
- 7. Dates:** Proposals must be received at AFOSR by 3:00 PM EST on March 28, 2003 to be considered.
- 8. Executive Summary:**

AFOSR is seeking proposals for research from medical or scientific organizations that are aimed at exploiting free electron laser (FEL) technology to develop new applications in medicine, photobiology, surgery, and in associated materials sciences. Offerors under this BAA must either have an operating FEL, or be capable of demonstrating the ability to acquire one within one year. Proposals for work of up to three years duration involving the operation and use of an FEL, and research on FEL applications by a team of biomedical and physical scientists are desired. Awards under this BAA may take the form of grants, contracts, cooperative agreements, or other appropriate mechanisms. Proposals will be evaluated by peer review according to the criteria provided below.

FULL TEXT OF ANNOUNCEMENT

I. Funding Opportunity Descriptions:

AFOSR invites the submission of proposals for research from medical or scientific organizations designed to exploit the application of free electron laser (FEL) technology in medicine and biology. Proposed studies and FEL utilization plans should be directed toward the development of new or improved applications of lasers in medicine, photobiology, surgery, and in associated materials sciences. Proposals should clearly describe plans to operate the FEL within a Center for Applications Research, including management plans for operations and estimates of time available for studies to be conducted by the Center staff, and also by interdisciplinary teams of physicians, biomedical scientists, and physical scientists not on the staff of the Center. Offerors should also describe facility and instrumentation configurations to be used to accommodate planned and potential FEL users. Proposals should be prepared as indicated below, and describe the work to be carried out over a three-year period. This is a Broad Agency Announcement. No formal Request for Proposals (RFP) or other solicitation regarding this announcement will be made.

II. Award Information:

Awards made under this BAA will support the operation and specific use of an FEL to conduct high quality biomedical research, and to attract and support an active community of scientists focused on developing new applications of FELs to medicine and biological systems. Awards

are anticipated to be in the form of grants, contracts, cooperative agreements, or other appropriate mechanisms. Should an award be made as a contract, the evaluation of socio-economic merit will include the extent of the commitment of the organization in providing meaningful subcontracting opportunities for small business, and any contract proposals exceeding \$500,000 will require a Small Business Subcontracting Plan in accordance with FAR 52.219-9. The North American Industry Classification System (NAICS) is 54171 (R&D in the Physical, Engineering and Life Sciences), with a small business size standard of 500 employees.

III. Eligibility Information:

1. Eligibility:

This announcement is directed toward organizations either having an operating FEL, or capable of having a fully operational FEL available within one year of the award. Collaborations with government, especially Defense-related, medical research agencies are desirable and encouraged. Proposals are also encouraged from historically Black colleges and universities and minority institutions (HBCU/MI), as defined by 10 USC 2323. Accredited U.S. post-secondary institutions that meet the statutory requirements for identification as minority institutions are listed on the Department of Education web site (www.ed.gov/offices/OCR/minorityinst.html). However, no funds under this announcement are specifically allocated for HBCU/MI participation.

2. Cost Sharing: Cost sharing is not required.

3. Other: None

IV. Application and Submission Information

1. Address for Application Package:

Please consult the AFOSR web page (www.afosr.af.mil) and select "Doing Business with AFOSR" under the Command logo on the Home Page. On this page, select the first listing "How to Apply for a Grant or Contract". A Cover Page is provided for download and completion for use in preparing a submission. If Internet access is not available, paper copies of this information can be requested by calling 703-696-5994 or by FAX at 703-696-9733.

2. Content and Form of Application Submission:

The Air Force Office of Scientific Research manages a Research Program for the Department of Defense aimed at exploiting unique features of free electron lasers (FELs) in medical and materials science research. We invite proposals for support of research centers that offer the combined talents of an interdisciplinary team of physicians and biomedical and physical scientists. Centers possessing an FEL should indicate they are responding to AFOSR BAA 2003-4; Centers without an FEL should respond to AFOSR BAA 2003-3. *The Deadline for receipt of proposals is 3:00 p.m EDT on March 28, 2003.* The period of performance should be for three years beginning October 1, 2003.

PROPOSAL GUIDELINES

A signed original plus ten (10) copies of the proposal should be sent to: Dr. Howard Schlossberg, MFEL Program Manager, Physics and Electronics Directorate, Air Force Office of Scientific Research, 4015 Wilson Boulevard, Room 712, Arlington, VA 22203-1954. The telephone number is (703) 696-7549. Text for proposals should use at least 10 point type (12 point

preferred) with 1.5 line spacing and 1 inch margins (top, sides, bottom). The following format should be used for preparing a proposal.

- A. Title Page
- B. Table of Contents
- C. Summary of Objectives (*max. 1 page, What questions will you address?*)
- D. Summary of the Approach (*max. 1 page, How will you address the questions?*)
- E. Statement of Significance (*max. 1 page, Why are the questions interesting? How is the research likely to lead to medical applications of FELs?*)
- F. Body of Proposal (*max 35 pages*)
 - 1. Introduction and Background Information (*help the reviewers understand how the proposed research relates to the state—of—the—art*)
 - 2. Statement of Work (*Outline the scientific tasks to be performed and who will perform them*)
 - 3. References
- G. Annual Budget broken down according to the tasks in the Statement of Work. Following the task breakdown provide a summary budget that includes all funds requested assembled into the following categories (indicate institutional matching where appropriate):
 - 1. Personnel salaries, wages and fringe benefits (indicate % effort)
 - 2. Consultants (list by name and indicate time to be spent on the project)
 - 3. Equipment — (attach price quotations/catalog listings for major items)
 - 4. Materials and supplies
 - 5. Travel (indicate purpose; identify and justify foreign travel)
 - 6. Indirect Costs
 - 7. Totals (by year and cumulative summary)
- H. Brief CV's (NIH style) for investigators and consultants
- I. For current and pending support (including proposals under review) of each investigator list:
 - 1. Project title and a one or two line summary
 - 2. Source and amount of funding (include number for current awards)
 - 3. Percentage effort devoted to each project
 - 4. State how projects are related to proposed effort
- J. Special information regarding certain types of experiments

Experiments involving animals require that the DoD Animal Use Approval forms must be filled out and submitted for each protocol approved by the institutional animal care and use committee. These forms must be reviewed and approved by the DoD office responsible for animal use review before an award can be made.

Experiments involving human subjects. Include a statement of compliance with DHHS regulations, "Protection of Human Subjects" (45 CFR 46, 1/26/81) and a copy of your Institutional Review Board approval.
- K. Appendices — Preliminary data, manuscripts, reprints, and any other supporting materials (3 copies only; note that appendices are not seen by all reviewers)

3. Submission Dates and Time: To receive consideration proposals must be received at AFOSR by 3:00 PM, EST, March 28, 2003.

4. Intergovernmental Review: None

5. Funding Restrictions: Award funds cannot be used for the purchase or construction of an FEL.

6. Other Submission Requirements. Only hard copy submissions will be accepted.

V. Application Review Information

1. Proposals will be evaluated by peer review according to the following criteria: Criteria a, b, and c are of equal importance:

- a. The overall scientific, technical, and socio-economic merits of the proposal.
- b. The offeror's capabilities, related experience, facilities, or unique combinations of these that are integral factors for achieving the proposal's objectives.

- c. The qualifications and experience of the proposed Principal Investigator and key personnel

2. Other evaluation criteria, is of lesser importance than a, b, and c, but equal to each other are:

- d. The relevance of the proposed research to realizing medical applications of FELs, especially those of military value.

- e. The realism of the proposed cost, and the availability of funds.

VI. Award Administration Information:

1. Award Notices: Principal Investigators of successful proposals will receive a notice, by letter or e-mail. For those proposals being recommended for funding as grants or cooperative agreements, the notification should not be regarded as an authorization to commit or expend funds (except at the recipient's own risk, to the extent that the recipient is allowed charging to awards of 90 days pre-award costs). Negotiations may result in funding levels that are less than proposed. Only an award document signed by a Government Contracting/Grants Officer will bind the Government.

2. Administrative Requirements: Title to equipment purchased under this program will be vested with universities without further obligation to the government. AFOSR's terms and conditions for grants are available at the AFOSR web page: www.afosr.af.mil. Directly under the AFOSR logo on the home page is "Doing Business with AFOSR". Contract awards will have terms and conditions as prescribed by the Federal Acquisition Regulations, as supplemented.

3. Reporting: A performance report will be due to AFOSR each year on September 01 and a final technical report will be due after completion of the research. For report content see (www.afosr.af.mil/pdfs/performance-reports/March2000.pdf). For those proposals being recommended for funding as grants or cooperative agreements, Financial Report using SF-269 (or SF-272) is required by Part 32 of the DoD Grant and Agreement Regulations (32 CFR part 32). Invention Reporting will be accomplished on DD Form 882 and will be due after completion of the research.

VII. Agency Contract(s): Address questions to:

Dr. Howard Schlossberg
AFOSR/NE, MFEL Program
4015 Wilson Blvd., Room 712
Arlington, VA 22203-1954